

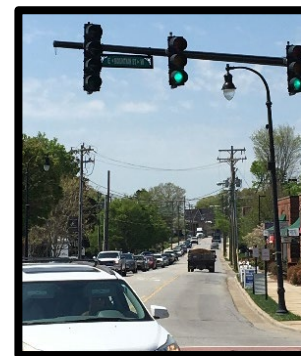
## ***Thoroughfare and Street Plan*** **Annual Report**

During the preparation and adoption of the 2011 *Thoroughfare and Street Plan* amendment, it was recognized that implementation of the *Thoroughfare and Street Plan* recommendations and policies would be determined by “... *available resources to implement the recommendations* ...” In 1997 the Town of Kernersville and Chamber of Commerce undertook the 2020 Visioning which resulted in a vision to address traffic congestion. As a result of the vision, the Town pursued the 1998 Transportation Bond. The voters passed a \$7,000,000 bond. Along with the Bond, and other funds the Town undertook over \$22,000,000 of transportation improvements. Of that expenditure, the Town obtained matching revenue of over \$6,500,000 from outside funding sources. The Town of Kernersville will spend its last Transportation Capital Reserve Fund on the South Main Street/Old Winston Road Intersection improvement project. The Town of Kernersville and Chamber of Commerce will be updating the 2020 Vision in 2019 and 2020. The results of the update may provide direction on what transportation issues the community desires to address in the future.

The next transportation planning phase activity is consolidating and updating our 2011 *Thoroughfare and Street Plan*, *Pedestrian and Bicycle Plan*, and *Greenway Plan* into a Comprehensive Transportation Plan. The 2017-2018 study provides the framework of drafting the Comprehensive Transportation Plan.

Along with the financial resources made available through the bond, the Town had the staff resources in place to efficiently operate a transportation program. The staff resources, during the peak of construction, included an Engineering Division consisting of an engineer, surveyor and project coordinator; Transportation Division consisting of an engineer, transportation planner, construction manager and three construction inspectors; contracts with several engineering firms; and several contracted administrative positions. All of those transportation staff resources are now gone except for two construction inspectors that are inspecting the new residential developments under construction. The other positions have been eliminated, except for a restructured position, Development Project Coordinator, that will be responsible for administering the Town’s Senior Transit Grant, and coordinating projects with our Metropolitan Planning Organizations, along with other non-transportation projects. Also, the new Town Engineer’s position is the Winston-Salem Metropolitan Planning Organization Technical Coordinating Committee member.

The Town of Kernersville is now in the position to consider reactivating and supporting a revitalized transportation program. As the Kernersville area continues to grow, traffic will increase and sections of the street network will become congested. Also, as the Kernersville continues to urbanize the calls for pedestrian and bicycle facilities, along with transit will continue to grow.

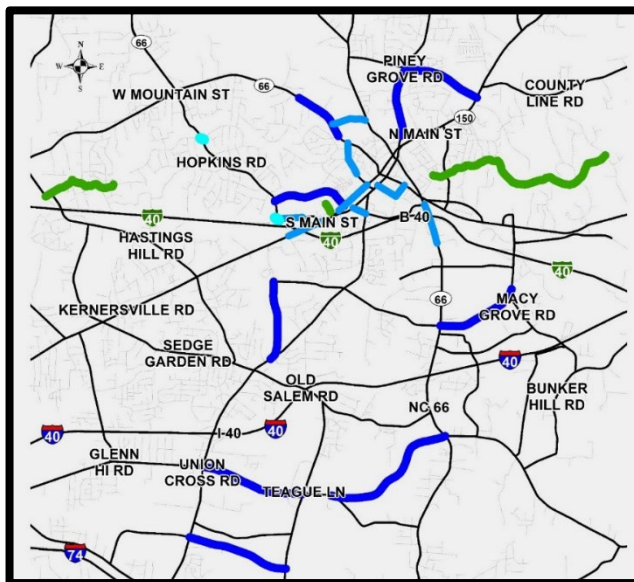


### Current Identified Transportation Projects

The Town’s current list of identified transportation projects, last updated in 2015, is provided below. Currently, the Town is not constructing any of those projects. However, several of those projects have seen changes during 2016 and 2017. NCDOT draft *State Transportation Improvement Program* (STIP) has both the *Big Mill Farm Road/Business-40 and Hopkins Road Widening*, and *Linville Spring Road Extension to North Main Street* fully funded, thus eliminating the need for the Town to undertake the *Linville Spring Road Extension to North Main Street* project. The *Big Mill Farm Road/Business-40 and Hopkins Road Widening* will also eliminate the need for the Town to undertake the *Hopkins Turn Lanes Regent/Timberwood* project, and will further decrease the traffic at the Hopkins Road and Old Winston Road intersection. This will most likely eliminate the need for the *Hopkins & Old Winston Intersection* project. The *Lambeth Farm Road Extension to Hopkins Road* project was modified by the Board of Aldermen to extend Lambeth Farm Road to Old Winston Road. The Town was awarded STP-DA funds from the Winston-Salem Metropolitan Planning Organization for the Old Winston Road sidewalk project.

#### 2015 TRANSPORTATION PROJECT LIST

New Streets and/or Widening	Sidewalks
Linville Springs Road Extension to North Main Street	South Main Street Sidewalk - Extension to Century Place Blvd
Lambeth Farm Road Extension to Hopkins Road	Bodenhamer Street Sidewalk - Dobson St to W. Mountain St.
Durham Street to Lambeth Farm Road	Oakhurst Street Sidewalk - Lambeth Farm Lane to W. Mountain St.
Masten Drive Extension to Union Cross Road	Sth. Cherry Street Sidewalk - Oakhurst St to Holy Cross
Shields Road Extension to Macy Grove Road	Old Winston Road Sidewalk - Hopkins Rd to Fitness Center
Glenn Hi Road Extension to Teague Lane	Pineview Street Sidewalk - S. Main St to Salisbury St.
Temple School Road Extension to Teague Lane	Hwy66 Sth Sidewalk - Pinview St to Birch Ln.
Bunker Hill Road Extension to Ogden School Road	Broad Street Sidewalk - E. Mountain St to Harmon St.
Piney Grove Widening and Sidewalks - Nelson St to Linville Springs Rd	Harmon Street Sidewalk - S. Main St to Broad St
W. Mountain Street Turn Lanes and Sidewalks	
	Greenways
	Southern St to Shopping Center - 10' Pedestrian and Bicycle Trail
	Piedmont Greenway - Hastings Hill/Gerry Dr/Long Walk/Bluff School Rd
	Piedmont Greenway - Triad Park/Reedy Fork Creek Section
Intersections	
Hopkins Road turnlanes at Regents Park Drive and Timberwood Trail	
Old Winston Road at Hopkins Rd	



## Current Transportation Projects

### NCDOT Projects

- **U-2579B W-S Beltway B-40 to US 158**
  - 71% completed
  - Completion November 2019
- **U-2579AB W-S Beltway B-40 to I-40**
  - Let Contract September 2020
  - Completion date yet to be determined.
- **U-2579AA W-S Beltway I-40 to US 311**
  - Let Contract September 2020
  - Completion date yet to be determined.
- **U-2579C W-S Beltway US 158 to US 311**
  - Awarded Contract November 2017
  - 34% completed
  - Completion June 2021
- **U-2579D,E&F W-S Beltway US 311 to US 52**
  - Let Contract March 2018
  - 11% completed.
  - Completion September 2021
- **U-4734 Macy Grove Road Extension to North Main Street**
  - Currently acquiring right-of-way.
  - 22% completed.
  - August 2020.
- **U-6003 Macy Grove Road Extension North Main Street to Piney Grove Road**
  - Let contract June 2022.
  - Completion date yet to be determined.
- **W-5510 South Main Street and Old Winston Road Intersection Improvements**
  - Completed
  - Waiting for final cost.
- **U-5760 Big Mill Farm Road Interchange at B-40 and Hopkin Road Widening** from Big Mill Farm Road to West Mountain Street
  - NCDOT currently designing.
  - ROW acquisition April 2021.
  - Let contract April 2022.
  - Completion date yet to be determined.
- **I-5981A & B Widen I-40** to 6 lanes from US 311 to NC 66
  - ROW acquisition 2025.
  - Let contract Jan. 2029.
  - Completion date yet to be determined.
- **I-5981C Widen I-40** to 6 lanes from NC 66 to B-40
  - ROW acquisition 2025.
  - Let contract 2029.
- **U-6068 Widen B-40** to 6 lanes from Beltway (I-74) to I-40
  - Let Contract Jan. 2027.
  - Completion date yet to be determined.
- **U-6077 Widen Kernersville Rd.** to multi-lanes from Harmon Creek Road to Sedge Garden Road (Beltway interchange)
  - Waiting for funding.

### Town Projects

- **Kerners Mill Greenway**
  - Design completed
  - ROW completed.
  - Construction anticipated to begin in Summer 2019.
- **Old Winston Road Sidewalk**
  - WSMPO 80% funds award
  - Design 2020
  - ROW 2020-2021.
  - Construction 2021.

## Current Status of Implementing the Recommendation of the *Thoroughfare and Street Plan*

### Adopted Policies

#### *Thoroughfare and Street Plan*

1. Develop a work program based on available resources to implement the recommendations of this study.

✓ *Ongoing*

2. The recommendations of the Thoroughfare and Street Plan Study shall be adopted as amendments to the *Thoroughfare and Street Plan*.

✓ *Completed*

3. The *Thoroughfare and Street Plan* shall be amended to reference the findings of the Thoroughfare and Street Plan Study.

✓ *Completed*

4. Amend the *Thoroughfare and Street Plan* into the current comprehensive transportation plan (CTP) format required for all metropolitan planning organization's thoroughfare plans, by incorporating the *Pedestrian and Bicycle Plan* and work towards creating a transit section.

✓ *Current updating of the 1999 Traffic and Transportation Study will provide the framework to pursue a comprehensive transportation plan (CTP). The Winston-Salem Urban Area Metropolitan Planning Organization has 80% funding available for assisting communities to prepare a CTP. Waiting for the results of the updated 2020 Vision to determine what direction the community wishes to take.*

5. Amend the *Thoroughfare and Street Plan* definitions for major and minor thoroughfares to read:

**Minor Thoroughfare:** A street which serves as a primary traffic artery of an urban area, serving the major centers of activity and carrying traffic between such centers at moderate speeds. The design shall not only include addressing the level of service and capacity of a road, but consider

design in the context of the surrounding land uses and address the multi-modal transportation needs of all potential users. Access to abutting property may be provided, however, the primary function is to carry traffic versus providing property access. The thoroughfare classifications also carry traffic between Major Thoroughfares. Access is primarily provided by at-grade intersections which may be signal controlled.

**Major Thoroughfare:** A thoroughfare that carries large volumes of traffic. The design shall not only include addressing the level of service and capacity of a road, but consider design in the context of the surrounding land uses and address the multimodal transportation needs of all potential users. Access onto the facility is controlled. Access should only be at intersections with other streets. Such intersections should be spaced at intervals which promote traffic progression with the absolute minimal delays incurred.

✓ *Completed*

6. As NCDOT updates their road classifications and cross-sections to conform to the NCDOT Complete Streets Policy (see Appendix 5 - NCDOT Preliminary Complete Streets Planning and Design Guideline Framework), the Town shall consider amending its *Thoroughfare and Street Plan* to incorporate language and road design that is compatible with the NCDOT Complete Streets Policy's road classifications, cross-sections, and context sensitive road design principles.

✓ *No changes to the NCDOT Complete Streets Policy.*

#### Community Input

1. Develop a community transportation vision statement for the *Thoroughfare and Street Plan*. Subsequently develop associated guidelines that prioritize aspects of a

comprehensive transportation system for the community.

- ✓ *Waiting for the results of the updated 2020 Vision to determine what direction the community wishes to take.*
2. Promote public participation during the “trigger points” for community input on major transportation projects for each of the major steps in the transportation planning process.
    - ✓ *Staff worked with NCDOT on encouraging public participation with the design of the Big Mill Farm Road Interchange and Hopkins Road widening, the two Macy Grove Extension projects, I-40 Widening and I-40 Macy Grove Interchange.*
  3. Assign staff to participate with NCDOT TIP staff on the planning, design, and construction of TIP projects to allow the Board of Aldermen to be up-to-date and consider enhancements to mitigate adverse impacts to the community and neighborhoods.
    - ✓ *Staff continues to participate with NCDOT and provide updates to the Board of Aldermen.*
  4. The public shall be encouraged to participate in the design of the new roads and road widening to assure “context sensitive” design elements are incorporated into the final design.
    - ✓ *Staff worked with NCDOT on encouraging public participation with the design of the Big Mill Farm Road Interchange and Hopkins Road widening. Over 300 citizens participated in an open house design charrette. Staff worked with NCDOT on the public participation of the Macy Grove Road Extension open houses. Staff continues to participate with the citizen participation of the I-40 widening and I-40 Macy Grove Interchange project.*

### Population, Employment and Traffic Trends and Projections

1. Town shall maintain past, current, and projected population and employment data generated at the federal, state, regional, county, and local level.
  - ✓ *Ongoing*
2. Town shall maintain past, current, and projected traffic counts generated at the state, regional, and local level on GIS. If staffing and resources are available, develop a specific local traffic count program to augment the state and regional.
  - ✓ *Ongoing*
3. All population, employment and traffic trends, and projections shall be made available to the public through the Town’s website or in written form if requested.
  - ✓ *Ongoing*
4. A citizen group shall be formed by the Board of Aldermen to undertake an annual review of the Town’s growth data and provide comments to the Planning Board and Board of Aldermen on data generated at the Town, county, regional, state, and federal levels. The citizen group shall be made up of residential, commercial, industrial, and institutional property owners.
  - ✓ *Completed and ongoing.*

### Traffic Studies

1. The Town shall work with NCDOT and the Metropolitan Planning Organizations on revising the regional traffic modeling for the Big Mill Farm Road Interchange by using the Beltway completed, newest Census, traffic counts, and other demographic data available to update the traffic model.
  - ✓ *Completed and ongoing.*
2. The Town’s transportation work program shall include a long range goal of building a traffic model that synchronizes the current and future traffic studies undertaken by private and public entities. First steps shall consist of maintaining existing traffic simulation models in one centrally organized database with a long term goal of connecting the missing gaps. Developer’s traffic impact analysis shall be required to use and follow the data standards of the model.

- ✓ *Completed a Transportation Study that included consolidating and summarizing completed traffic studies.*
- 3. Town staff shall continue to participate with NCDOT and the metropolitan planning organizations on traffic modeling projects.
  - ✓ *Ongoing.*
- 4. During the review of major development proposals, the traffic generation impacts shall be considered within a traffic impact analysis. “Major developments” shall be defined in a Town adopted traffic impact analysis policy.
  - ✓ *Calebs Creek and Welden projects were required to undertake traffic studies to allow them to address adverse traffic and safety impacts.*

#### Road Design Within the Road Network

1. Design of future roads and improvements shall incorporate the NCDOT’s Complete Street Policy strategies that incorporate “*transportation, quality of life, and economic development are all undeniably connected through well-planned, well-designed, and context sensitive transportation solutions*”. Town staff shall work to develop a process that would bring together the MPO, NCDOT, and the public to determine what appropriate context sensitive solutions would be appropriate on the different classification of roads in different land use areas within the Town. See **Appendix 5** – “NCDOT Preliminary Complete Streets Planning & Design Guidelines Framework” for further information on “complete streets”.
  - ✓ *The Town advocated that the Big Mill Farm Road Interchange and Hopkins Road widening, and the Macy Grove Extension from North Main Street to Piney Grove Road follow the NCDOT Complete Street design standards for a 2-lane divided avenue with pedestrian and bicycle facilities.*
  - ✓ *The Town placed rezoning conditions on the Calebs Creek, Welden, Smith Crossing and Marketview developments to incorporate “complete street” design elements.*
2. A comprehensive list of context sensitive road design elements shall be developed to create a “tool box” of available design elements that can be applied to different road cross-sections.
  - ✓ *Currently no funds or staff resources are assigned to project.*
3. Design of future roads and improvements shall not only include addressing the level of service and capacity of a road, but also consider design in the context of the surrounding existing and planned land uses.
  - ✓ *The Town advocated that the Big Mill Farm Road Interchange and Hopkins Road widening and the Macy Grove Extension from North Main Street to Piney Grove Road follow the NCDOT Complete Street design standards for a 2-lane divided avenue with pedestrian and bicycle facilities.*
4. In order to reduce the need to widen roads and create large intersections, connectivity of the road network shall continue to be pursued along with traffic calming principles and devices to control the speed of through traffic.
  - ✓ *Ongoing*
5. Town design standards in the *Design and Construction Specifications* manual shall be reviewed every 5 years to ensure community vision and goals are reflected.
  - ✓ *Town updated the “Design and Construction Specifications” manual in 2016.*
6. Town staff shall work towards a long term goal of having cross-sections on all thoroughfare plan elements to provide further definition to concerned stakeholders. Future steps shall include coordination and meetings with NCDOT, MPO staff, as well as public and businesses.
  - ✓ *Currently no staff resources assigned to project.*
7. It is recommended that the NCDOT Complete Street “2-lane Avenue” street type be the road design for thoroughfares through residential neighborhoods. See **Appendix 5** – “NCDOT Preliminary Complete Streets Planning & Design Guidelines Framework”

for further information on “complete streets”.

- ✓ *Calebs Creek rezoning includes a condition that Teague Lane and Ogden School Road shall be a “2-lane Avenue”.*
- ✓ *Big Mill Farm Road and Hopkins Road widening and the Macy Grove Extension from North Main Street to Piney Grove Road are a “2-lane Avenue”.*

### **South Main Street, Big Mill Farm Road, Old Winston Road, and Hopkins Road**

1. Complete the current traffic study for South Main Street/Old Winston Road improvements, which is being conducted for the Town by Ramey Kemp and Associates, in conjunction with the Winston-Salem Urban Area Metropolitan Planning Organization, and NCDOT.
  - ✓ *Completed*
2. After the completion of the South Main Street/Old Winston Road Traffic Study, pursue funding for the construction of the recommended road and intersection improvements. These improvements should be considered as the 1# road improvement for next fiscal year’s Transportation Capital Improvement Program.
  - ✓ *NCDOT constructed the project with funding support from the Winston Salem Urban Area Metropolitan Planning Organization (MPO) and the Town of Kernersville.*
3. To determine if the South Main Street/Old Winston Road intersection improvements are adequate to address the traffic congestion on South Main Street; the Big Mill Farm Road Interchange shall not be built until after the South Main Street/Old Winston Road intersection improvements are completed.
  - ✓ *South Main Street/Old Winston Road improvement completed, and the Big Mill Farm Road Interchange is scheduled to start construction in 2022 at the earliest.*
4. The Town staff shall disseminate to the community that the Big Mill Farm Road Interchange is not a NCDOT TIP funded project and shall notify the community when

NCDOT is considering funding the interchange.

- ✓ *NCDOT has awarded the funding to begin the design and they have begun the design work. The Town continues promoting public participation in the design.*
5. Big Mill Farm Road and Hopkins Road shall be designated as a “Minor Thoroughfare” on the Thoroughfare and Street Plan.
    - ✓ *Completed*
  6. Timberview Drive connection between Wexford Subdivision and Barrington Park Subdivision shall not be connected.
    - ✓ *No plans on connection.*
  7. Work with the Winston-Salem Urban Area Metropolitan Planning Organization, and NCDOT to incorporate the recently adopted NCDOT Complete Street Policy to design the proposed Big Mill Farm Road and Hopkins Road north of Big Mill Farm Road in the context of the neighborhood. It is recommended that the NCDOT Complete Street “2-lane Avenue” street type be the road design for Big Mill Farm Road and Hopkins Road. See **Appendix 5** – “NCDOT Preliminary Complete Streets Planning & Design Guidelines Framework” for further information on “complete streets”.
    - ✓ *The Town advocated that the Big Mill Farm Road Interchange and Hopkins Road widening follow the NCDOT Complete Street design standards for a 2-lane divided avenue with pedestrian and bicycle facilities.*
  8. After the Town completes its comprehensive list of “context sensitive” road design elements and determines design elements that can be applied to the NCDOT’s Hopkins Road and Big Mill Farm road project, encourage public participation to recommend “context sensitive” design elements for the road project.
    - ✓ *Staff worked with NCDOT on encouraging public participation with the design of the Big Mill Farm Road Interchange and Hopkins Road widening. Over 300 citizens participated in an open house design charrette.*

9. Continue to maintain the population and employment and traffic projections for the Western Road Network and planning schedule of the B-40/Big Mill Farm Road Interchange to keep the residents and businesses up-to-date on the status of the project.
  - ✓ *Ongoing*
10. Continue to obtain and protect the right-of-way needed for the ultimate improvements even as smaller incremental improvements are phased in. This is to assist in minimizing the impact on future property owners and lower the cost of future road widening.
  - ✓ *Ongoing*
5. Community Development staff shall develop a homeowner's association list to distribute information regarding future road corridor and widening projects.
  - ✓ *Currently no funds or staff resources are assigned to project.*
6. The Town of Kernersville shall maintain data to assist residents and businesses in understanding if and when a potential road project is justified based on level of service, traffic counts, safety issues, and other related justification for road projects. The projected data associated with traffic studies and models shall be adjusted as actual populations and traffic data is received to reflect current base line conditions.
  - ✓ *Ongoing.*

#### Public Awareness

1. Community Development staff shall develop a program and material to present to the local real estate firms that provide information on the *Thoroughfare and Street Plan*. At a minimum, annually staff shall distribute the material and offer to make presentations to the local offices.
  - ✓ *Ongoing*
2. Staff shall present an annual report to the Planning Board and Board of Aldermen on the status of implementing the *Thoroughfare and Street Plan* and *Transportation Capital Improvement Program* and shall include press releases regarding the report.
  - ✓ *Ongoing*
3. Public Services staff shall develop a signage program that identifies future road corridor and widening projects, similar to the "future interstate signage" used on the Federal Interstate system.
  - ✓ *Currently no funds or staff resources are assigned to project.*
4. During the preliminary subdivisions and special use district rezoning, a condition of approval shall include the requirement that deeds shall contain language on future road corridors and widening projects in or adjacent to the development.
  - ✓ *Ongoing, during rezoning staff recommends developers to dedicate the property associated with any future road widening.*
7. During the next revision of the Kernersville's website home page, add a direct link to Town adopted plans that include the *Thoroughfare and Street Plan*.
  - ✓ *Website home page has a "Community Development" launch which includes a direct link to [Thoroughfare and Street Plan](#).*

#### Transportation Program

1. The transportation program shall pursue the development of data and analysis to allow for the Town to have factual information on the capacity of the thoroughfares and their intersections; traffic counts and projections; and cost benefit analysis of potential road improvements to allow for prioritizing road improvements through the Transportation Capital Improvement Program.
  - ✓ *Completed a Transportation Study that included gathering the required data for the analysis to determine issues and opportunities, thus allowing the Town to look at prioritizing projects. Study results will be used as the base data for updating the 2020 Vision.*
2. Consideration shall be given to adequately fund road improvements through the Capital Improvement Program after the fiscal year 2013-14. Funding will need to be sufficient to adequately address infrastructure maintenance, staffing and transportation improvement goals established by the Board of Aldermen.



- ✓ *The last remaining funds in the Transportation Capital Reserve fund is projected to be spent next fiscal year. Staff is recommended the FY 2019-20 Budget transfers \$200,000 into the Transportation Reserve Fund to begin rebuilding the fund.*
3. The Transportation Division shall continue to coordinate transportation planning and improvements with NCDOT and the local metropolitan planning organizations.
- ✓ *The Transportation Division was restructured into the Community Development Department's Planning and Engineering Division. Town Engineer is the Technical Coordinating Committee member.*

**Road Network Recommendations**

• **Interstates**

- **Issue:** The interstates of I-40 and B-40 are the primary thoroughfares carrying local and through traffic. When the Interstates reach capacity, the local traffic will begin to divert to the local road network and increasing local traffic congestion. The NCDOT Transportation Improvement Program (TIP) has a project to add an additional lane to I-40.

- **Recommendations:**

- The Town shall begin to work with the Winston-Salem Urban Area Metropolitan Planning Organization and NCDOT to study the feasibility of adding an additional lane on B-40.
- ✓ *NCDOT has added to the State Transportation Improvement Program widening B-40 to 6 lanes with a projected start date in 2029.*

- **Issue:** The Town’s primary access to the proposed Beltway will be via B-40/South Main Interchange. The additional traffic attracted to the Beltway via the B-40/South Main Interchange will only compound the traffic congestion on South Main Street. The Board of Aldermen in a 2005 Resolution to NCDOT, requested NCDOT to build the B-40/Big Mill Farm Road Interchange at the same time of the beltway to address the traffic issues that the Beltway will cause in Kernersville because there will be no direct access to the Beltway with the elimination of the possible West Mountain Street Interchange.

- **Recommendation:**

- The Town shall continue to work with the Winston-Salem Urban Area Metropolitan Planning Organization, and NCDOT to address this Beltway access issue.
- ✓ *NCDOT’s State Transportation Improvement Program calls for construction to begin in 2022.*

✦ **Western Road Network**

- **Issue:** The NCDOT approved feasibility study for the proposed 4-lane road improvement for Big Mill Farm Road and Hopkins Road north of Big Mill Farm Road

has the potential to adversely impact the adjacent residential neighborhoods.

- **Recommendations:**

- The Town shall begin to work with the Winston Salem Urban Area Metropolitan Planning Organization, and NCDOT to incorporate the recently adopted NCDOT Complete Street Policy to design the roadway in the context of the neighborhood. It is recommended that the NCDOT Complete Street “2-lane Avenue” street type be the road design for thoroughfares through residential neighborhoods. See **Appendix 5** – “NCDOT Preliminary Complete Streets Planning & Design Guidelines Framework” for further information on “complete streets”.



Example of a “Complete Street Design”

- **Issue:** Planned future road and road widening projects have the potential of negative and/or positive impacts on the surrounding area in such residential and commercial areas of Hopkins Road (*Kernersville Boulevard*), Big Mill Farm Road (*Kernersville Boulevard*), South Main Street, and West Mountain Street. Many times, the current property owners along the corridors are concerned about the unknowns of when a road project will take place and future phases of the project.

- **Recommendations:**

- As property is developed along the corridors that will experience road widening or new projects, the Town shall pursue the required right-of-ways and easements for the ultimate potential road width to assist in minimizing the future impacts of the road improvements.
- The Town shall develop the data that can be provided to adjacent property owners with projections of when road improvement projects will be required, and what type of road improvement would potentially take place if funding was available.



Metropolitan Planning Organization, and NCDOT to obtain construction funding for the Macy Grove Interchange and the Macy Grove Road extension to North Main Street.

- The Town shall determine if the funding within the Capital Improvement Program is available in the future for construction of the Macy Grove extension from North Main Street to Piney Grove Road.
- Since the ultimate traffic flow benefits of the Kernersville Boulevard are not reached until the connection is made to Linville Springs Road, the Town shall begin to investigate the funding of the Linville Springs Extension through NCDOT funds as well.

✓ *The Town's successful pursuit of Triad Business Park, anchored by FedEx Ground was the final catalyst to have NCDOT fund and complete the Macy Grove Interchange and funding of the Macy Grove Extension to Piney Grove.*

- **Issue:** The proposed 4-lane road improvement for the Macy Grove extensions and Linville Springs Road widening has the potential to adversely impact the adjacent residential neighborhoods.

○ **Recommendation:**

- The Town shall begin to work with the Winston-Salem Urban Area Metropolitan Planning Organization and NCDOT to incorporate the recently adopted NCDOT Complete Street Policy to design the roadway in the context of the neighborhood, which shall consider all available NCDOT cross sections. It is recommended that the NCDOT Complete Street “2-lane Avenue” street type be the road design for thoroughfares through residential neighborhoods. See **Appendix 5 – “NCDOT Preliminary Complete Streets Planning & Design Guidelines Framework”** for further information on “complete streets”.

✓ *NCDOT is following the Town's recommendation of a “2-lane Avenue” for the Macy Grove Extension from North Main Street to Piney Grove Road.*

*Currently there are no plans to widen Linville Springs Road.*

- **Issue:** Planned future road and road widening projects have the potential of negative and/or positive impacts on the surrounding area in such residential and commercial areas of Linville Springs Road and Extensions (*Kernersville Boulevard*), Smith Edwards Road (*Kernersville Boulevard*), and Piney Grove Road. Many times, the current property owners along the corridors are concerned about the unknowns of when a road project will take place and future phases of the project.

○ **Recommendations:**

- As property is developed along the corridors that will experience road widening or new projects, the Town shall pursue the required right-of-ways and easement for the ultimate potential road width to assist in minimizing the future impacts of the road improvements.
- The Town shall develop the data that can be provided to adjacent property owners with projections of when road improvement projects will be required and what type of road improvement would potentially take place if funding was available.
- The Town shall develop enhancement standards that can be used to assist in minimizing the future adverse impacts of the road improvements, such as landscaping, lighting fixtures, sidewalks, bike lanes, etc. that offer the opportunity to enhance the area.

✓ *Staff continues to work with NCDOT on determining the schedule of future road improvements and advising the public of those schedules. Staff will continue to work with NCDOT on opportunities to incorporate enhanced design designers.*

• **Central Road Network (Downtown)**

- **Issue:** In the downtown area, road improvement options are limited due to existing businesses and homes in close proximity to the street. Even with the completion of the proposed Kernersville Boulevard, the level of service of the downtown section of North Main Street, residential sections of South Main Street and South Cherry Street, and East

Bodenhamer Street are projected to be at a Level of Service “E” or worse in 2035. South and North Cherry Street has the most potential for road improvements that will enhance traffic flow, while being designed in the context of the downtown and residential area it travels through.

- **Recommendation:**
  - Undertake a study to begin the process of expanding the downtown streetscape improvements, similar to North Main, to North Cherry, South Cherry, South Main, East Mountain and West Mountain and study alternative road improvements which would include one-way pairs; 2-lane divided “complete street design” (*see to the left for example in downtown New Bern*); and other types of alternatives.
  - ✓ *Current Transportation Study has a recommendation to expanding the downtown streetscape.*



- **Issue:** Planned future road and road widening projects have the potential of negative and/or positive impacts on the surrounding area in such residential, commercial and downtown areas of South Cherry Street, North Cherry Street, West Mountain Street, East Mountain Street, and South Main Street. Many times, the current property owners along the corridors are concerned about the unknowns of when a road project will take place and future phases of the project.
- **Recommendations:**
  - As property is developed along the corridors that will experience road widening or new projects, the Town

shall pursue the required right-of-ways and easement for the ultimate potential road width to assist in minimizing the future impacts of the road improvements.

- The Town shall develop the data that can be provided to adjacent property owners with projections of when road improvement projects will be required and what type of road improvement would potentially take place if funding was available.
  - The Town shall develop enhancement standards that can be used to assist in minimizing the future adverse impacts of the road improvements, such as landscaping, lighting fixtures, sidewalks, bike lanes, etc. that offer the opportunity to enhance the area.
  - It is recommended that the NCDOT Complete Street “2-lane Avenue” street type be the road design for thoroughfares through residential neighborhoods. See **Appendix 5** – “NCDOT Preliminary Complete Streets Planning & Design Guidelines Framework” for further information on “complete streets”.
  - ✓ *Staff continues to work with NCDOT on determining the schedule of future road improvements and advising the public of those schedules. Staff will continue to work with NCDOT on opportunities to have enhanced design.*
- **Eastern Road Network**
    - **Issue:** With the anticipated, relatively rapid growth in the area south of B-40 and east of NC66, the Town will need to pursue road improvements and additions to the existing road network. Funding will remain a major challenge on facilitating the improvements to NC 66 South intersections and the I-40 interchange. Without improvements, NC 66 South, I-40, and B-40 interchanges will far exceed the capacity to carry future traffic demands.
    - **Recommendations:**
      - The Town shall begin to work with the Winston-Salem Urban Area Metropolitan Planning Organization for planning funds to determine what type of improvements could take place and their cost.
      - The Town shall begin work with the High Point MPO to coordinate land use

- and necessary transportation improvements between NC 66 and Bunker Hill Road around I-40, including a potential I-40 interchange at Macy Grove Road.
  - ✓ *The 2017-18 Transportation Study identified the existing and future traffic capacity issues.*
- **Issue:** With the anticipated, relatively rapid growth in the area surrounding the airport (*Aerotropolis*) the Town will need to pursue road improvements and additions to the existing road network. Funding will remain a major challenge. With only 1 major east-west freeway connection east of B-40, higher priority will need to be given to local road network.
- **Recommendations:**
  - The Town shall begin to work with the Greensboro MPO to coordinate land use and necessary transportation improvements between the two municipalities north of I-40.
  - ✓ *Through the staff's participation on the "Regional Land Use Projections and Traffic Modeling Committee" staff continues to work with High Point, Greensboro, Winston-Salem, Forsyth, and Guilford on enhancing our land use projections and traffic modeling.*
- **Issue:** Planned future road and road widening projects have the potential of negative and/or positive impacts on the surrounding area in such residential, Commercial, and industrial areas of Macy Grove Road and Shields Road Extension (*Kernersville boulevard*). Many times, the current property owners along the corridors are concerned about the unknowns of when a road project will take place and future phases of the project.
  - **Recommendations:**
    - As property is developed along the corridors that will experience road widening or new projects, the Town shall pursue the required right-of-ways and easement for the ultimate potential road width to assist in minimizing the future impacts of the road improvements.
    - The Town shall develop the data that can be provided to adjacent property owners with projections of when road improvement projects will be required, and what type of road improvements would potentially take place if funding was available.
- The Town shall develop enhancement standards that can be used to assist in minimizing the future adverse impacts of the road improvements, such as landscaping, lighting fixtures, sidewalks, bike lanes, etc. that offer the opportunity to enhance the area.
  - The Town shall continue to develop a process of coordinating the planning for the major thoroughfares, minor thoroughfares, and collector streets with the Greensboro Urban Area Metropolitan Planning Organization, High Point Urban Area Metropolitan Planning Organization, and residents. Based on the determination of required cross-sections, staff will complete functional "context sensitive" road designs.
  - It is recommended that the NCDOT Complete Street "2-lane Avenue" street type be the road design for thoroughfares through residential neighborhoods. See **Appendix 5** – "NCDOT Preliminary Complete Streets Planning & Design Guidelines Framework" for further information on "complete streets".
  - ✓ *Staff continues to work with developers, NCDOT and our Metropolitan Planning Organizations on incorporating complete street design elements in future street projects. Also, staff continues working with property owners, developers and NCDOT to ensure there is adequate future right-of-way.*
- **Southern Road Network**
  - **Issue:** With the anticipated relatively rapid growth in the area, south of I-40, the Town will need to pursue road improvements and additions to the existing road network. Funding will remain a major challenge to facilitate those improvements. The Town has a planned thoroughfare network that is projected to meet traffic demands. Without the implementation of that thoroughfare plan the road network south of I-40 will far exceed the capacity to carry future traffic demands:
  - **Recommendations:**

- The Town shall continue to work with the Forsyth County Commission, Winston-Salem Urban Area Metropolitan Planning Organization, and developers in implementing the thoroughfare plan south of I-40.
  - With the major roads and interchanges seemingly adequately planned for the future, the County and Town will need to work towards reserving the rights-of-ways for these improvements and ensure connectivity between the thoroughfares.
  - ✓ *The 2017-18 Transportation Study identified the existing and future traffic capacity issues.*
- **Issue:** Planned future road and road widening projects have the potential of negative and/or positive impacts on the surrounding area in such residential, commercial and industrial areas of NC 66, Union Cross Road, Whicker Road and Extension (*Kernersville Boulevard*), Shields Road (*Kernersville Boulevard*), Old Salem Road, Glenwood Drive, Teague Lane, Glen Hi/Bunker Hill Extension, and Temple School Road Extension. Many times, the current property owners along the corridors are concerned about the unknowns of when a road project will take place and future phases of the project.
- **Recommendations:**
  - As property is developed along the corridors that will experience road widening or new projects, the Town shall pursue the required right-of-ways and easements for the ultimate potential road width to assist in minimizing the future impacts of the road improvements.
  - The Town shall develop the data that can be provided to adjacent property owners with projections of when road improvement projects will be required and what type of road improvements would potentially take place if funding was available.
  - The Town shall develop enhancement standards that can be used to assist in minimizing the future adverse impacts of the road improvements, such as landscaping, lighting fixtures, sidewalks, bike lanes, etc. that offer the opportunity to enhance the area.
  - It is recommended that the NCDOT Complete Street “2-lane Avenue” street type be the road design for thoroughfares through residential neighborhoods. See **Appendix 5** – “NCDOT Preliminary Complete Streets Planning & Design Guidelines Framework” for further information on “complete streets”.
  - ✓ *Staff continues to work with developers, NCDOT and our Metropolitan Planning Organizations on incorporating complete street design elements in future street projects. Also, staff continues working with property owners, developers and NCDOT to ensure there is adequate future right-of-way.*